In Re the Application of:

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Group Art Unit: 2125

Examiner: Not Yet Assigned

**SECOND REQUEST FOR** CORRECTION OF FILING RECEIPT

"A PROCESS AND APPARATUS For:

> FOR IMPROVING AND CONTROL-LING THE VULCANIZATION OF NATURAL AND SYNTHETIC RUBBER COMPOUNDS"

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

MAGILL et al.

Atty. File No.: 3944-13-CIP-1

Serial No.: 10/800,079

Filed: March 11, 2004

CERTIFICATE OF MAILING

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO THE COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313-1450 ON THIS // DAY , 2004.

SHERIDAN ROSS P.C.

Dear Sir:

This is a Second Request for correction of the filing receipt, in response to the Response to Request for Corrected Filing Receipt issued by the U.S. Patent Office on July 2, 2004 (Confirmation No. 4830) (copy enclosed), wherein it states that the Office is unable to comply with our previous request because:

"continuity claimed under 35 U.S.C. § 120 cannot be added to the Filing Receipt without the applicant supplying the relationship (continuation, divisional, or continuation-in-part) in an Application Data Sheet or amendment to the first page of the specification."

Presumably, the priority information referred to above was obtained from the Application Data Sheet which did not identify the relationship between the present application and prior applications. However, the first page of the specification fully identifies such relationships. Accordingly, in addition to identifying such relationships herein, a Supplemental Application Data Sheet is also being filed herewith that also identifies the relationships in question.

Additionally, enclosed herein are copies of the previously filed Application Data Sheet wherein the priority data claimed is found on pages 4 and 5, the first page of the specification

Patent Application Transmittal wherein the priority data is in the paragraph immediately following the mailing address. These documents were submitted in the present patent application when the application was initially filed with the U.S. Patent Office on March 11, 2004. Each of these documents identify all prior applications from which the present application claims priority.

Therefor, Applicants respectfully request that the Filing Receipt be corrected as follows:

#### In the Domestic Priority Data as Claimed by Applicant

This application is a CIP of	10/666,433	09/18/2003
which is a CIP of	10/267,197	10/08/2002
which claims the benefit of	60/394,736	07/09/2002
This application also claim the benefit of	09/815,342	03/21/2001
and	10/102,614	03/19/2002
which claims the benefit of	60/278,034	03/21/2001

For your reference, a copy of the Filing Receipt is enclosed, with the corrections indicated in red. Please issue a corrected Filing Receipt for this patent application.

Respectfully submitted, SHERIDAN ROSS P.C.

3y (4. Can)

Dennis J. Dapray, Ph.D.

Registration No. 46,299 1560 Broadway, Suite 1200

Denver, Colorado 80202-5141

(303) 863-9700

J:\3944\-13-CIP-1\Correction of Receipt-02.wpd

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re the Application of: MAGILL et al. Serial No.: 10/800,079 Filed: March 11, 2004 Atty. File No.: 3944-13-CIP-1

"A PROCESS AND APPARATUS For:

FOR IMPROVING AND CONTROLLING THE

**VULCANIZATION OF NATURAL** 

AND SYNTHETIC RUBBER

COMPOUNDS"

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313

Group Art Unit: 2125

Examiner: Not Yet Assigned

**SUPPLEMENTAL APPLICATION DATA SHEET** 

#### CERTIFICATE OF MAILING

I HEREBY CERTIFY THAT THIS CORRESPONDENCE IS BEING DEPOSITED WITH THE UNITED STATES POSTAL SERVICE AS FIRST CLASS MAIL IN AN ENVELOPE ADDRESSED TO THE COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA 22313 ON THIS 15 DAY OF

, 2004.

SHERIDAN ROSS P.C.

09/18/2003

Chasity C. Rossum

#### **DOMESTIC PRIORITY INFORMATION**

which is a CIP of 10/267,197 10/08/2002 which claims the benefit of 60/394,736 07/09/2002 This application also claim the benefit of 09/815,342 03/21/2001

This application is a CIP of 10/666,433

10/102,614 03/19/2002 and

which claims the benefit of 60/278,034 03/21/2001

Respectfully submitted,

SHERIDAN ROSS AC.

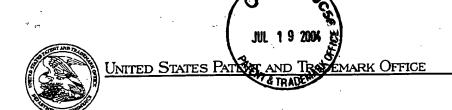
Dennis J. Dupray, Ph.D.

Registration No. 46,299

1560 Broadway, Suite 1200 Denver, Colorado 80202-5141

(303) 863-9700

J:\3944\-13-CIP-X\PTO\ADS-02.wpd



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Dox 1450 Alexandria, Vinginia 22313-1450 www.uspio.gov

FILING OR 371(c) DATE FIRST NAMED APPLICANT ATTY. DOCKET NO./TITLE APPLICATION NUMBER

10/800,079

03/11/2004

Richard Magill

3944-13-CIP-1

22442 SHERIDAN ROSS PC 1560 BROADWAY **SUITE 1200 DENVER, CO 80202** 

RECEIVED

JUL 0 7 2004

SHERIDAN, ROSS

**CONFIRMATION NO. 4830** 

OC000000013101917\*



Date Mailed: 07/02/2004

### RESPONSE TO REQUEST FOR CORRECTED FILING RECEIPT

#### **Domestic Continuity and Foreign Priority**

In response to your request for a corrected Filing Receipt, the Office is unable to comply with the request because:

The priority or continuity claim has not been entered because it was not filed during the required time period. Applicant may wish to consider filing a petition to accept an unintentionally delayed claim for priority. See 37 CFR 1.55 or 1.78.
Continuity claimed under 35 U.S.C. § 120 cannot be added to the Filing Receipt without the applicant supplying the relationship (continuation, divisional, or continuation-in-part) in an Application Data Sheet or amendment to the first page of the specification.
A claim for priority cannot be made based on an application filed after the application making the claim.
Domestic benefit and foreign priority claims will not be captured in a provisional application. A provisional application is not entitled to a right of priority or to the benefit of an earlier filing date of any other application. See 35 U.S.C. § 111(b)(7) and 37 CFR 1.53(c)(4).
A domestic continuity claim cannot be made to a foreign application and the filing receipt will only list the foreign country, application number, and filing date.
Foreign priority will appear on the Filing Receipt in the following order: Country, Application number Filing date.
This application is the result of a conversion from a provisional application. Priority based on such

	The application(s) to which priority is claimed were filed over a year prior to the filling date of this application. Therefore, the referenced application(s) cannot be claimed as domestic or foreign priority.
	To change the benefit claim of a U.S. prior-filed application, applicant must amend the first sentence of the specification (if the benefit claim is referenced in the specification), or provide a supplemental application data sheet (ADS) (if the benefit claim was submitted in an ADS), with the desired benefit claim. Note that once a benefit claim is deleted, applicant will not be able to claim such prior-filed application again, if the above-identified application was filed on or after November 29, 2000.
	To change a foreign priority claim, applicant must submit a supplemental oath or declaration (if the priority claim is referenced in the oath or declaration), or a supplemental application data sheet (ADS) (if the priority claim was submitted in an ADS), with the desired priority claim. If a supplemental ADS is submitted, any deletions should be shown with strikeouts. Note that once a priority claim is deleted, applicant will not be able to claim such foreign application again, if the above-identified application was filed on or after November 29, 2000.
J.L	
Customer	Service Center
Initial Pate	ent Examination Division (703) 308-1202
	PART 1 - ATTORNEY/APPLICANT COPY





# A PROCESS AND APPARATUS FOR IMPROVING AND CONTROLLING THE VULCANIZATION OF NATURAL AND SYNTHETIC RUBBER COMPOUNDS

#### RELATED APPLICATIONS

This is a continuation-in-part application of pending prior U.S. Patent Application No. 10/666,433 filed September 18, 2003, which is a continuation-in-part of U.S. Patent Application No. 10/267,197 filed October 8, 2002 which claims the benefit of U.S. Provisional Patent Application No. 60/394,736 filed July 9, 2002. This application also claims the benefit of both U.S. Patent Application No. 09/815,342 filed March 21, 2001, and U.S. Patent Application No. 10/102,614 filed March 19, 2002 which claims the benefit of U.S. Provisional Patent Application No. 60/278,034 filed March 21, 2001. The entire disclosures of the above-cited prior applications are considered to be part of the disclosure of the accompanying application and accordingly are hereby fully incorporated by reference.

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#### RELATED FIELD OF THE INVENTION

This invention relates to a new and improved process and apparatus for monitoring and controlling the vulcanization of natural and synthetic rubber compounds containing fillers such as carbon black, oils, clay, and the like. Typical base rubber polymers which may be employed include styrene-butadiene, polybutadiene, polyisoprene, ethylene-propylene, butyl, halobutyl, nitrile, polyacrylic, neoprene, hypalon, silicone, fluorcarbon elastomers, polyurethane elastomers, natural rubber and hydrogenated nitrile-butadiene rubber, and mixtures thereof.

#### BACKGROUND OF THE INVENTION

Heretofore methods of applying fixed process parameters to the processing of rubber polymeric compounds during vulcanization have resulted in both reduced productivity due to overly conservative cure times and poor product uniformity due to the inability of the fixed process parameters to accommodate the inherent variability in the process.



# UTILITY CONTINUATION-IN-PART PATENT APPLICATION TRANSMITTAL

(Only for Continuation-in-Part applications under 37 CFR 1.53(b))

ney Docket No.:

3944-13-CIP-1

EV368035947US

Inventors:

Richard Magill of 2875 Dharma Avenue, Broomfield, Colorado 80020 John C. Van Doren of 193 Twilight Terrace, Bailey, Colorado 80421 Bruce Sellers of 2104 Jackson Street, Golden, Colorado 80401 Tim Erickson of 7766 S. Saulsbury Street, Littleton, Colorado 80128 Scott Schneider of 2314 W. Costilla Avenue, Littleton, Colorado 80120 Steve Courington of 9821 Cypress Point Circle, Lone Tree, Colorado 80124

Lance Bethel of 11182 Chase Way, Westminster, Colorado 80020

Express Mail Label No.:

EV368035947US

Title:

"A PROCESS AND APPARATUS FOR IMPROVING AND CONTROLLING THE VULCANIZATION OF NATURAL AND SYNTHETIC RUBBER COMPOUNDS"

Mail Stop Patent Application Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

This is a continuation-in-part application of pending prior U.S. Patent Application No. 10/666,433 filed September 18, 2003, which is a continuation-in-part of U.S. Patent Application No. 10/267,197 filed October 8, 2002 which claims the benefit of U.S. Provisional Patent Application No. 60/394,736 filed July 9, 2002. This application also claims the benefit of both U.S. Patent Application No. 09/815,342 filed March 21, 2001, and U.S. Patent Application No. 10/102,614 filed March 19, 2002 which claims the benefit of U.S. Provisional Patent Application No. 60/278,034 filed March 21, 2001. The entire disclosures of the prior applications, from which a copy of the oath or declaration is supplied, are considered to be part of the disclosure of the accompanying application and are hereby incorporated by reference.

Enclosed for filing with the above-identified utility patent application, please find the following:

- 1. [X] Applicant claims small entity status. See 37 CFR 1.27.
- 2. [X] Specification (Total Pages of Text, including Abstract and Claims: 53)
- 3. [X] Drawing(s) (35 USC 113) (Total Sheets: 20) [] FORMAL [X] INFORMAL
- 4. [] Nonpublication Request under 35 U.S.C. 122(b)(2)(B)(i).
- 5. [X] Application Data Sheet
- 6. [X] Information Disclosure Statement (IDS/PTO-1449)
- 7. [X] Return Postcard (MPEP 503) (should be specifically itemized)
- 8. [X] A check in the amount of \$475.00 is enclosed.

#### FEE CALCULATION:

	-				SMALL ENTITY			LARGE ENTITY	
		COL. 1 O. FILE		(COL. 2*) NO. EXTRA	RATE	FEE		RATE	FEE
BASIC FEE:						\$385.00	OR		\$770.00
TOTAL CLAIMS:	30		20	10	X \$9 =	\$90.00	OR	X \$18 =	
INDEP. CLAIMS:	1		3	0	X \$43 =	\$0.00	OR	X \$86 =	
MULTIPLE	DEPEN	DENT C	LAIMS		+ \$145 =	\$0.00	OR	+\$290 =	
*IF THE DIFFERE ZERO, ENTER "O"			IS LESS	S THAN	TOTAL:	\$475.00			

#### **OTHER INFORMATION:**

- 1. [X] The Commissioner is hereby authorized to debit any underpayments or credit any overpayment to Deposit Account No. 19-1970.
- 2. [X] The Commissioner is hereby authorized to charge all required fees for extensions of time under §1.17 to Deposit Account No. 19-1970.
- 3. [] Foreign Priority benefits are claimed under 35 USC §119 of Patent Application Serial No. filed
- 4. Correspondence Address:

Dennis J. Dupray SHERIDAN ROSS P.C. 1560 Broadway, Suite 1200 Denver, Colorado 80202-5141 Telephone: (303) 863-9700 Facsimile: (303) 863-0223

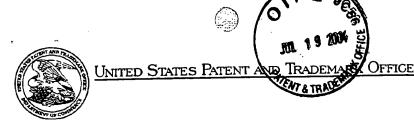
5. [X] Customer No: **22442** 

Respectfully submitted,

SHERMAN ROSS P.C

Dennis J. Dupray

Registration No. 46,299



UNITED STATES DEPARTMENT OF COMMERCE

UNITED STATES DEPARTMENT OF COMMI United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS PO. Box 1450 Alexandria. Vigana 22313-1450 www.uspic.gov

IND CLMS TOT CLMS DRAWINGS FILING OR 371 ATTY.DOCKET NO FIL FEE REC'D ART UNIT (c) DATE 30 20 3944-13-CIP-1 475 03/11/2004 2125 10/800,079

**CONFIRMATION NO. 4830** 

22442 SHERIDAN ROSS PC 1560 BROADWAY **SUITE 1200 DENVER, CO 80202** 

RECEIVED

JUN 0 4 2004

SHEPPDAN, ROSS

FILING RECEIPT OC000000012825518

Date Mailed: 06/01/2004

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

Applicant(s)

Richard Magill, Broomfield, CO; John C. Van Doren, Bailey, CO; Bruce Sellers, Golden, CO; Tim Erickson, Littleton, CO; Scott Schnieder, Aurora, CO; · Steve Courington, Lone Tree, CO; Lance Bethel, Westminster, CO;

## **Assignment For Published Patent Application**

Signature Control Systems, Denver, CO;

## Domestic Priority data as claimed by applicant

This application is a CIP of 10/666,433 09/18/2003 which is a CIP of 10/267,197 10/08/2002 which claims benefit of 60/394,736 07/09/2002 This application also claims priority from 09/815, 343 3-21-01 and 10/102/1614 3-19-02

Foreign Applications

Which claims the benefit of 40/278,034 3-21-01.

If Required, Foreign Filing License Granted: 05/29/2004

Projected Publication Date: To Be Determined - pending completion of Missing Parts

Non-Publication Request: No

# IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re the Application of:	
MAGILL et al.	) ) APPLICATION DATA SHEET
Serial No.: Not Yet Assigned	) ATTLICATION DATA SHEET
Filed: Herewith	)
Atty. File No.: 3944-13-CIP-1	) Express Mail Label: EV368035947US
For: "A PROCESS AND APPARATUS FOR IMPROVING AND CONTROLLING THE	) COPY
<b>VULCANIZATION OF NATURAL</b>	)
AND SYNTHETIC RUBBER COMPOUNDS"	)
COMIT COLIDS	,

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313

## **INVENTOR INFORMATION**

**Inventor One Name:** 

Richard Magill

Residence Address:

2875 Dharma Avenue

Broomfield, Colorado 80020

U.S.A.

Mailing Address:

2875 Dharma Avenue

Broomfield, Colorado 80020

U.S.A.

Citizenship Country:

U.S.A.

**Inventor Two Name:** 

John C. Van Doren

Residence Address:

193 Twilight Terrace

Bailey, Colorado 80421

U.S.A.

Mailing Address:

193 Twilight Terrace

Bailey, Colorado 80421

U.S.A.

Citizenship Country:

U.S.A.

**Inventor Three Name:** 

Bruce Sellers

Residence Address:

2104 Jackson Street

Golden, Colorado 80401

U.S.A.

Mailing Address:

2104 Jackson Street

Golden, Colorado 80401

U.S.A.

Citizenship Country:

U.S.A.

**Inventor Four Name:** 

Tim Erickson

Residence Address:

7766 S. Saulsbury Street

Littleton, Colorado 80128

U.S.A.

Mailing Address:

7766 S. Saulsbury Street

Littleton, Colorado 80128

U.S.A.

Citizenship Country:

U.S.A.

**Inventor Five Name:** 

Scott Schnieder

Residence Address:

19468 E. 59th Avenue

Aurora, Colorado 80019

U.S.A.

Mailing Address:

19468 E. 59th Avenue

Aurora, Colorado 80019

U.S.A.

Citizenship Country:

U.S.A.

**Inventor Six Name:** 

Steve Courington

Residence Address:

9821 Cypress Point Circle Lone Tree, Colorado 80124

U.S.A.

Mailing Address:

9821 Cypress Point Circle

Lone Tree, Colorado 80124

U.S.A.

Citizenship Country:

U.S.A.

**Inventor Seven Name:** 

Lance Bethel

Residence Address:

11182 Chase Way

Westminster, Colorado 80020

U.S.A.

Mailing Address:

11182 Chase Way

Westminster, Colorado 80020

U.S.A.

**Citizenship Country:** 

U.S.A.

#### CORRESPONDENCE INFORMATION

**Correspondence Customer Number:** 

22442

Name One:

Sheridan Ross, P.C.

Address:

1560 Broadway

**Suite 1200** 

Denver, Colorado 80202-5141

U.S.A.

Telephone:

(303) 863-9700

Fax:

(303) 863-0223

**Electronic Mail:** 

srlaw@sheridanross.com

#### APPLICATION INFORMATION

Title Line One:

"A PROCESS AND APPARATUS FOR IMPROVING AND

CONTROLLING THE VULCANIZATION OF NATURAL AND

SYNTHETIC RUBBER COMPOUNDS"

**Total Drawing Sheets:** 

20

Formal Drawings:

No

Suggested Drawing for Publication:

13

**Application Type:** 

Utility Continuation-In-Part

**Docket Number:** 

3944-13-CIP-1





No

Contract or Grant Numbers One: Contract or Grant Numbers Two: Not Applicable
Not Applicable

Secrecy Order in Parent Appl.:

No

# REPRESENTATIVE INFORMATION

Representative Customer Number: 22442

Registration Number One:	29,127
Registration Number Two:	31,713
Registration Number Three:	31,328
Registration Number Four:	32,020
Registration Number Five:	33,374
Registration Number Six:	33,005
Registration Number Seven:	35,536
Registration Number Eight:	39,617
Registration Number Nine:	37,739
Registration Number Ten:	38,942
Registration Number Eleven:	38,031
Registration Number Twelve:	40,638
Registration Number Thirteen:	42,460
Registration Number Fourteen:	44,189
Registration Number Fifteen:	42,499
Registration Number Sixteen:	42,801
Registration Number Seventeen:	46,299
Registration Number Eighteen:	48,040
Registration Number Nineteen:	47,999
Registration Number Twenty:	45,246
Registration Number Twenty-One:	51,470
Registration Number Twenty-Two:	51,829
Registration Number Twenty-Three:	52,055
Registration Number Twenty-Four:	43,512
Registration Number Twenty-Five:	54,022
•	

# DOMESTIC PRIORITY INFORMATION

# This application claims the benefit of:

**Application One:** 

10/666,433

Filing Date:

September 18, 2003

Application Two:

10/267,197

Filing Date:

October 8, 2002

**Application Three**:

60/394,736

Filing Date:

July 9, 2002

**Application Four:** 

10/102,614

Filing Date:

March 19, 2002

**Application Five:** 

09/815,342

Filing Date:

March 21, 2001

Application Six:

60/278,034

Filing Date:

March 21, 2001

# **ASSIGNEE INFORMATION:**

Assignee One:

Signature Control Systems

Address One:

10180 West Hampden Avenue

Denver, Colorado 80227

# PRIOR FOREIGN APPLICATIONS

Foreign Application One::

Not Applicable

Filing Date::

Not Applicable

Country::

Not Applicable

Priority Claimed::

No

Respectfully submitted,

SHERIDAN ROSS P.C.

By:

Dennis J. Youpray, Jh.D.

Registration No. 46,299

1560 Broadway, Suite 200 Denver, Colorado 80202-5141

(303) 863-9700